

03060106-130

(Lower Three Runs/Par Pond)

General Description

Watershed 03060106-130 is located in Barnwell and Allendale Counties and consists primarily of **Lower Three Runs** and its tributaries. The watershed occupies 55,350 acres of the Sand Hills, Upper Coastal Plain, and Lower Coastal Plain regions of South Carolina. The predominant soil types consist of an association of the Blanton-Fuquay series. The erodibility of the soil (K) averages 0.13, and the slope of the terrain averages 3%, with a range of 0-10%. Land use/land cover in the watershed includes: 48.6% forested land, 20.8% barren land, 18.0% agricultural land, 8.3% forested wetland, 3.1% water, 0.6% urban land, and 0.6% nonforested wetland.

Ponds A, B, and C form one arm of Par Pond, and Ponds 2, 4, and 5 form another arm. Downstream of Par Pond, Lower Three Runs accepts drainage from Gantts Mill Creek (Patterson Branch), Bodiford Mill Creek, Miller Creek (Bentley Branch, Fiddle Pond Creek), Davis Branch, Furse Mill Creek (Mill Creek, Browns Pond, Furse Creek, Furse Pond, Johnson Pond, Terry Pond), The Big Bay (Lake Echee), and Smith Lake Creek. There are a total of 139.10 stream miles and 948.4 acres of lake waters within this watershed, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
SV-328	P/BIO	FW	LOWER THREE RUNS AT S-0620, 7.5MI SW BARNWELL
SV-175	S	FW	LOWER THREE RUNS AT SC 125, 11MI NW ALLENDALE

Lower Three Runs - There are two monitoring sites along Lower Three Runs. Aquatic life uses are fully supported at the upstream site (**SV-328**) based on macroinvertebrate community, physical, and chemical data; however, there is a significant increasing trend in turbidity. There is also a significant decreasing trend in pH. A significant increasing trend in dissolved oxygen concentration and significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are fully supported at this site; however, there is a significant increasing trend in fecal coliform bacteria concentration.

At the downstream site (**SV-175**), aquatic life uses are fully supported. There is a significant decreasing trend in pH. A significant increasing trend in dissolved oxygen concentration and a significant decreasing trend in five-day biochemical oxygen demand suggest improving conditions for these parameters. In sediments, P,P'DDE, a metabolite of DDT, was detected in the 1998 sediment sample. Although the use of DDT was banned in 1973, it is very persistent in the environment. Recreational uses are fully supported at this site; however, there is a significant increasing trend in fecal coliform bacteria concentration.

Natural Swimming Areas

FACILITY NAME
RECEIVING STREAM

PERMIT #
STATUS

FURSE POND
FURSE MILL CREEK

03-N01
ACTIVE

NPDES Program

Active NPDES Facilities

RECEIVING STREAM
FACILITY NAME
PERMITTED FLOW @ PIPE (MGD)

NPDES#
TYPE
COMMENT

LOWER THREE RUNS
STARMET CMI
PIPE #: 001, 002 FLOW: M/R

SCG250052
MINOR INDUSTRIAL

PAR POND TRIBUTARY
USDOE WESTINGHOUSE SRS
PIPE #: PP1 FLOW: 0.00121

SC0000175
MAJOR INDUSTRIAL

Nonpoint Source Management Program

Land Disposal Activities

Landfill Activities

SOLID WASTE LANDFILL NAME
FACILITY TYPE

PERMIT #
STATUS

ALLIED GENERAL NUCLEAR SERVICES
INDUSTRIAL

IWP-130

Land Application Sites

LAND APPLICATION SYSTEM
FACILITY NAME

ND#
TYPE

SPRAYFIELDS
SC ADVANCED TECHNOLOGY PARK WWTP

ND0080985
DOMESTIC

Growth Potential

There is a low to moderate potential for growth in this watershed, which contains portions of the Towns of Snelling and Kline, and the Savannah River Site. The Savannah River Site extends across the upper portion of the watershed. The Savannah River Site employs 25,000 people from nearby counties and is responsible for the overall growth in proximity to the site. There has been a small increase in residential growth in the non-SRS area of the watershed as a result of SRS activities.